

Patent Application.

Method of releasing Teledapt cables from deeply recessed RJ connectors

15th June 1999

Problem intended to be solved

The use of teledapt cabling in the telecom industry is widespread and in a lot of cases is intended to be handled for at least connect / disconnect purposes. This exposes the equipment to the potential of static discharge to the connector by the person connecting / disconnecting the cable. This can be overcome by recessing the connector in the housing creating a greater air gap between the person's finger and the conductors in the connector. However this negates the ease of use by requiring the use of some sort of tool / aid to deactivate the locking arm on the teledapt connector to remove the cable.

How was it done prior to this invention

ESD requirements were reduced, the electronic circuitry was designed to withstand the static discharge or the connector was recessed, reducing the ease of disconnect. All of these have negative impacts.

Key unique technical aspects

A simple, cheap method of actuating the locking lever on a teledapt cable when the connector is recessed into the enclosure to provide ESD protection or for other reasons. It utilizes tooling features in the connector body to locate and retain it.

electrostatic discharge

Invention Description

A flat piece of non conductive material shaped as per figure 1 is inserted into the rear of the RJ connector. The shoulders on the part (a) prevent the part from being pulled out of the connector from the front, the length of the actuator tongue (b) is such that it extends out of the enclosure, the thickness (c) is such that it does not interfere with the teledapt cable locking arm movement and the part is prevented from being pushed out of the connector by some other means, in our case a wall incorporated in the enclosure.

being

As seen in figure 2, when assembled, movement of the actuator tongue outside of the enclosure will unlock the teledapt cable latch inside allowing the cable to be extracted.

where is this?

Other variations

If ESD is not a concern then a conductive material can be used to make the part as an actuator.

If the provision of a wall to retain the part is problematic the features could be added to the part to retain it. Figure 3. Is an example that would retain itself on the connector housing.

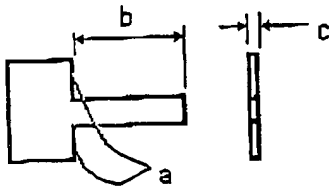
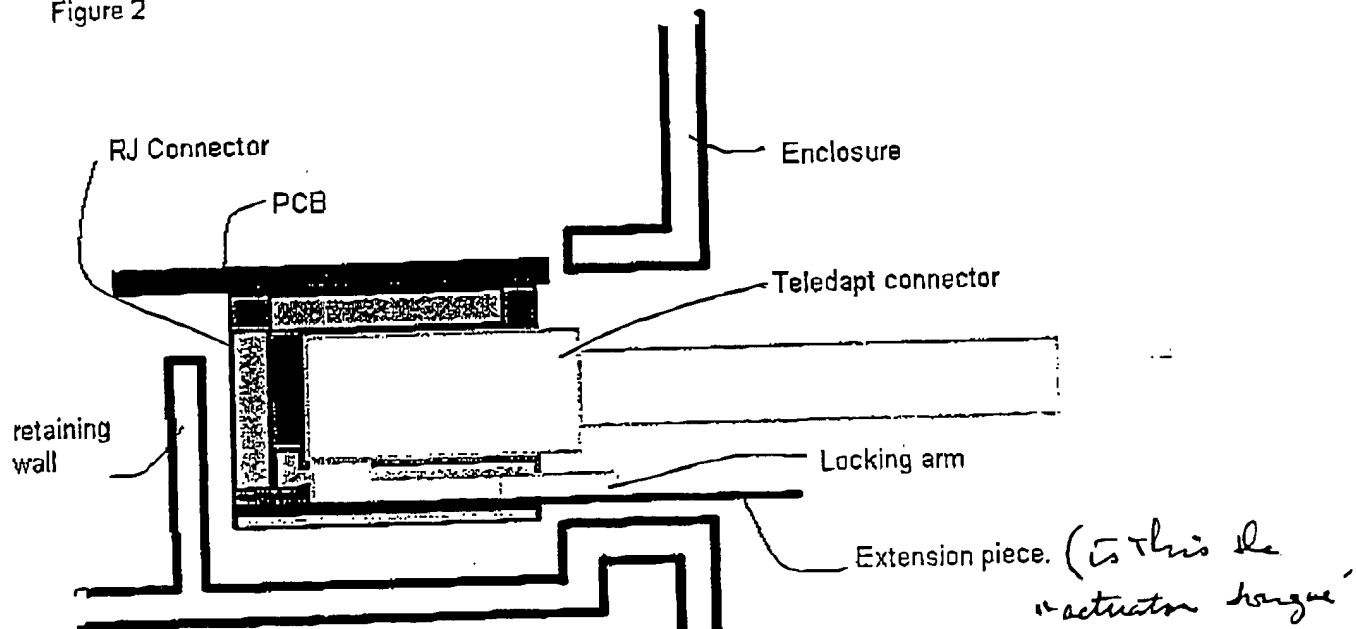


Figure 1.

Figure 2



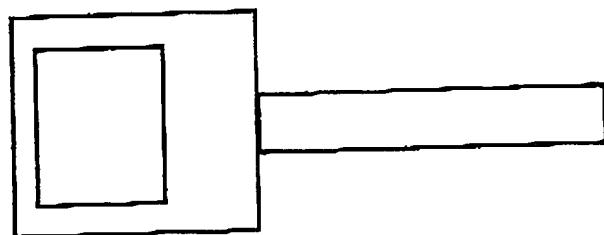


Figure 3.